WHAT IS CLAIMED IS:

1. A method in a Packet Control Function (PCF) for participating in the set-up of a traffic path during mobile station (MS) handoff in a cdma2000 network, wherein the network further comprises a Base Station Controller (BSC), and a Packet Data Serving Node (PDSN), and the BSC is the target BSC for the MS, the method comprising the steps of:
   - upon reception of an "A9 - Set-up - A8" message from the BSC, sending an A10 Connection Request to the PDSN; and
   - upon reception of a response from the PDSN, sending an "A9 - Connect - A8" message to the BSC.

2. A Packet Control Function (PCF) for participating in the set-up of a traffic path during mobile station (MS) handoff in a cdma2000 network, wherein the network further comprises a Base Station Controller (BSC), and a Packet Data Serving Node (PDSN), and the BSC is the target BSC for the MS, the PCF comprising:
   - a reception unit for receiving:
     - an "A9 - Set-up - A8" message from the BSC; and
     - an A10 Connection Result message from the PDSN;
   - a transmission unit for sending:
     - an A10 Connection Request message to the PDSN; and
     - an "A9 - Connect - A8" message to the BSC; and

- a computing unit, connected to the reception unit and the transmission unit, for:
  - analysing received messages; and
  - ordering the transmission of:
    - the message to the PDSN in response to reception of the message from the BSC; and
    - the message to the BSC in response to reception of the message from the PDSN.

3. A method for setting up a traffic path during mobile station (MS) handoff in a cdma2000 network, wherein the network further comprises a Base Station Controller (BSC), a Packet Control Function (PCF), and a Packet Data Serving Node (PDSN), wherein the MS is to hand off to the BSC, the method comprising the steps of:
   - sending an "A9 - Set-up - A8" message from the BSC to the PCF;
   - upon reception of the "A9 - Set-up - A8" message, sending an A10 Connection Request from the PCF to the PDSN;
   - sending an A10 Connection Result from the PDSN to the PCF; and
   - upon reception of the A10 Connection Result, sending an "A9 - Connect - A8" message from the PCF to the BSC.

4. The method according to claim 3, wherein the network further comprises a Mobile Switching Centre (MSC), and the step of sending an "A9 - Set-up - A8" message from the BSC to the PCF is preceded by the step of sending a Handoff Request from the MSC to the BSC.

5. The method according to claim 4, wherein the BSC is a first BSC and the network further comprises a second BSC, and the step of sending a Handoff Request from the MSC to the BSC is preceded by the step of sending a Handoff Required message from the second BSC to the MSC.

6. The method according to claim 3, wherein the MS has an active air link with the second BSC while the steps of the method are performed.

7. The method according to claim 3, wherein the PDSN is a first PDSN and the network further comprises a second PDSN, wherein the method further comprises, upon reception by the first PDSN of the A10 Connection Request and before the step of sending an A10 Connection Result from the PDSN to the PCF, the steps of:

- sending a Handoff Solicitation message from the first PDSN to the second PDSN; and
- sending a Response from the second PDSN to the first PDSN.

8. The method according to claim 7, wherein the Handoff Solicitation comprises the IP address to which the first PDSN wants to receive messages from the second PDSN.

9. The method according to claim 8, wherein the IP address is a signalling IP address, and the A10 Connection Result comprises a traffic IP address on which the PDSN wants to receive traffic intended for the MS.

10. The method according to claim 3, wherein the A10 Connection Result comprises an IP address on which the PDSN wants to receive traffic intended for the MS.

11. A system for setting up a traffic path during mobile station (MS) handoff in a cdma2000 network, the network further comprising a Base Station Controller (BSC), a Packet Control Function (PCF), and a Packet Data Serving Node (PDSN), wherein the system comprises:

- the BSC for sending "A9 - Set-up - A8" messages to the PCF and receiving "A9 - Connect - A8" messages from the PCF;
- the PDSN for receiving A10 Connection Requests from the PCF and sending A10 Connection Results to the PCF; and

- the PCF for sending an A10 Connection Request to the PDSN upon reception of an "A9 - Set-up - A8" message from the BSC, and sending an "A9 - Connect - A8" to the BSC upon reception of an A10 Connection Result from the PDSN.

12. The system according to claim 11, wherein the system further comprises a Mobile Switching Centre (MSC) for sending a Handoff Request from the MSC to the BSC.

13. The system according to claim 12, wherein the BSC is a first BSC and the system further comprises a second BSC for sending a Handoff Required message from the second BSC to the MSC, and the MSC further is for receiving this message.

14. The system according to claim 11, wherein the PDSN is a first PDSN and the system further comprises a second PDSN, wherein first PDSN further is for sending a Handoff Solicitation message to the second PDSN, and the second PDSN is for sending a Response to the first PDSN.

15. The system according to claim 14, wherein the first PDSN further is for sending an IP address to which the first PDSN wants to receive messages from the second PDSN in the Handoff Solicitation.

16. The system according to claim 15, wherein the IP address is a signalling IP address, and the first PDSN further is for sending a traffic IP address to which the PDSN wants to receive traffic intended for the MS in the A10 Connection Result.

17. The system according to claim 11, wherein the PDSN further is for sending in the A10 Connection Result an IP address to which the PDSN wants to receive traffic intended for the MS.

18. A method for changing the routing of traffic to a mobile station (MS) in a cdma2000 network, the network further comprising a first and a second Packet Data Serving Node (PDSN) and a Home Agent (HA), wherein the HA has registered that data traffic for the MS is to be sent to the first PDSN for further routing to the MS, the MS is in the domain of the second PDSN, the MS and the first PDSN store Point-to-Point Protocol (PPP) context information and have a PPP connection, and there is a tunnel between the first and second PDSN through which data traffic received by the first PDSN for the MS is sent, the method comprising the steps of:

- transferring PPP context information relating to the MS from the first PDSN to the second PDSN;
- upon reception of all the necessary PPP context information, sending an Agent Advertisement from the second PDSN to the MS;
- sending a Mobile IP (MIP) Re-registration message from the MS to the HA;
- changing, upon reception of the MIP Re-registration message, by the HA the registration for the MS so that it indicates that data traffic for the MS should be sent to the second PDSN;

- sending a MIP Result message from the HA to the second PDSN to acknowledge the re-registration message; and
- establishing by the second PDSN a PPP connection to the MS using the stored PPP context information.

19. The method according to claim 18, further comprising, after the step of enabling by the second PDSN a PPP connection to the MS, the step of sending an Update message from the second PDSN to the first PDSN to initiate the release of resources related to the MS that are used by the first PDSN.

20. A system for changing the routing of traffic to a mobile station (MS) in a cdma2000 network, the system comprising a first and a second Packet Data Serving Node (PDSN) and a Home Agent (HA), wherein the MS has handed off to the domain of the second PDSN, and the MS stores Point-to-Point Protocol (PPP) context information and has a PPP connection with the first PDSN, wherein:
- the HA is for:
  - registering to which PDSN data traffic for the MS is to be sent for further routing to the MS;
  - changing the registration for the MS upon reception of a Mobile IP (MIP) Re-registration message from the MS; and
  - sending a MIP Result message to the second PDSN to acknowledge the Re-registration message; and
- the first PDSN is for:
  - storing PPP context information;

- sending data traffic for the MS through a tunnel to the second PDSN; and
- transferring PPP context information relating to the MS to the second PDSN; and

- the second PDSN is for:
  - receiving the PPP context information from the first PDSN;
  - storing the PPP context information;
  - sending an Agent Advertisement to the MS;
  - forwarding a MIP Re-registration message from the MS to the HA; and
  - establishing a PPP connection to the MS using the stored PPP context information.

21. The system according to claim 20, wherein the second PDSN further is for sending an Update message to the first PDSN to initiate the release of resources related to the MS that are used by the first PDSN.

22. A Packet Data Serving Node (PDSN) in a cdma2000 network, wherein the network comprises a second PDSN storing Point-to-Point Protocol (PPP) context information relating to a Mobile Station (MS) that has handed off to the first PDSN, and a Home Agent (HA) that has registered that the MS is served by the second PDSN, the PDSN comprising:

- a reception unit for receiving:
  - the PPP context information from the second PDSN; and

  - a Mobile IP (MIP) Re-registration message from the MS;
- a memory for storing the PPP context information;
- a transmission unit for:
  - sending an Agent Advertisement to the MS; and
  - forwarding the MIP Re-registration message to the HA; and
- a connection establishment unit for establishing a PPP connection to the MS using the stored PPP context information.

23. The PDSN according to claim 22, wherein the transmission unit further is for sending an Update message to the second PDSN to initiate the release of resources related to the MS that are used by the second PDSN.